**A little arithmetic with matrices**

Similar to what you have learned with vectors, the standard operators like +, -, /, \*, etc. work in an element-wise way on matrices in R.

For example, 2 \* my\_matrix multiplies each element of my\_matrixby two.

As a newly-hired data analyst for Lucasfilm, it is your job is to find out how many visitors went to each movie for each geographical area. You already have the total revenue figures in all\_wars\_matrix. Assume that the price of a ticket was 5 dollars. Simply dividing the box office numbers by this ticket price gives you the number of visitors.

# A little arithmetic with matrices (2)

Just like 2 \* my\_matrix multiplied every element of my\_matrix by two, my\_matrix1 \* my\_matrix2 creates a matrix where each element is the product of the corresponding elements in my\_matrix1 and my\_matrix2.

After looking at the result of the previous exercise, big boss Lucas points out that the ticket prices went up over time. He asks to redo the analysis based on the prices you can find in ticket\_prices\_matrix (source: imagination).

Those who are familiar with matrices should note that this is not the standard matrix multiplication for which you should use *%\*%* in R.